REMARKS

Claims 1, 3-9, 11-17 and 19-24 are pending in the application.

Claims 1, 9 and 17 have been amended.

Claims 1, 3-9, 11-17 and 19-24 have been rejected.

Claims 1, 3-9, 11-17 and 19-24 remain pending in this application.

Reconsideration of the claims is respectfully requested.

I.   CLAIM REJECTION UNDER 35 U.S.C. § 103

Claims 1, 9 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,078,963 to *Civanlar, et al.*, hereinafter "Civanlar" in view of U.S. Patent Publication No. 2004/0156371 to *Kumar, et al.*, hereinafter "Kumar". The Applicant respectfully traverses the rejection.

Claims 5 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Civanlar in view of Kumar as applied to claims 1, 9 and 17 above, and further in view of U.S. Patent Publication No. 2005/0053080 to *Wybenga, et al.*, hereinafter "Wybenga". The Applicant respectfully traverses the rejection.

In ex parte examination of patent applications, the Patent Office bears the burden of establishing a prima facie case of obviousness. MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; In re

Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a prima facie case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of a patent. In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A prima facie case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

The Applicant directs the Examiner's attention to amended independent Claim 1, which recites unique and novel elements including those emphasized below:

1.   For use in a telecommunication network, a router comprising:
a switch fabric; and
N Layer 2 modules coupled by said switch fabric, each of said N Layer 2 modules operable to receive data packets in Layer 2 frames and forward said received data packets using Layer 2 addresses associated with said Layer 2 frames, wherein a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet *if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet* and wherein said Layer 3 routing engine comprises a forwarding table comprising a plurality of aggregated Layer 3 addresses *wherein if the Layer 3 routing engine cannot forward the data packet, the Layer 2 engine will inspect the data packet and forward the data packet according to Layer 2 protocols.* [Emphasis Added]

The amendments to the claims are fully supported by the original specification, as filed

including paragraph [030], which is reproduced below:

FIGURE 2 depicts flow diagram 200, which illustrates the routing of Layer 3 data packets that are found in the routing tables of Layer 2 modules 111-114 according to an exemplary embodiment of the present invention. Initially, a Layer 2 module (e.g., L2 module 111) receives an incoming data packet from an external source (process step 205). If the L2 address is known, L2 module 111 simply switches the data packet to an outbound L2 module or route processing module (RPM) according to conventional techniques. However, if the L2 address is unknown, L2 module 111 checks the protocol type. If it is not a supported protocol type, then the L2 frame is handled as unknown frames are handled by the L2 protocols. For Ethernet, as with all known L2 protocols, the frame is flooded to all ports except the port on which it arrived, using standard Ethernet processing. If it is a supported L3 protocol type, L2 module 111 transfers the received data packet to L3 routing engine 121, which determines that the required L3 routing information is in the

forwarding (or routing) table associated with L3 routing engine 121 (process step 210). Next, L2 module 111 uses the L3 routing information from forwarding table to transfer the received data packet to another port on L2 module 111, to another L2 module, or to a route processing module via switch fabric 160 (process step 215).

Claims 9 and 17 comprise similar amendments to Claim 1. These amendments are respectfully submitted not to introduce new matter.

The Applicant respectfully submits that neither *Civanlar* nor *Kumar*, either alone or in combination, discloses, teaches or suggests routing a packet first through a Level 2 module, and then through a Layer 3 module "if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet," as recited by independent Claim 1. This element was discussed in paragraph [0025] of the present disclosure, which is reproduced herein for the sake of clarity:

> [025] According to the principles of the present invention, router 100 operates under a "switch-if-you-can, route-if-you-must" approach. As FIGURE 1 illustrates, router 100 is a distributed architecture with a plurality of Layer 2 modules (L2Ms) and a plurality of route processor modules (RPMs) that are interconnected by switch fabric 160. The terms "Layer 2" and "Layer 3" refer to the OSI model and are well known to those skilled in the art. L2 modules 111-114 and 131-132 receive incoming data packets organized in Layer 2 frames (e.g., Ethernet frames) that are identified by a Layer 2 address (e.g., a MAC address). The Ethernet frames may contain Layer 3 packets (e.g., Internet protocol (IP) packets) that are identified by a Layer 3 address (e.g., IP address).

The approach of routing data first through the Layer 2 module and then through the Layer 3 module is not taught or suggested by any of the prior art of record. The Examiner attempts to

analogize the routing a packet first through a Level 2 module, and then through a Layer 3 module "if

said first Layer 2 module does not recognize a Layer 2 address associated with said first received

data packet" with Col. 3 ll. 28-47 of Civanlar. Applicant respectfully submits that the cited section

of Civanlar does not teach or suggest using the Layer 2 addresses first, and the Layer 3 addresses

only if the Layer 2 address is not present. For the purpose of clarity, the cited section of Civanlar is

reproduced below:

> The routing engine 107 in the intelligent router port 103 may maintain and process routing data from the routing data base 104 for use by the forwarding engine 105. Each intelligent router port 103 may be configured to independently generate its own routing tables without the need for a central routing engine and/or a master routing table. In some embodiments, information necessary for generating and/or updating routing tables may be contained in routing protocol packets received by the intelligent router port 103 from the network interface. Any known types of routing protocols packets may be received by the routing engine 107, such as those conforming to the routing Internet protocol (RIP), the open shortest path forwarding (OSPF) protocol, or the border gateway protocol 4 (BGP4). In embodiments where the routing table is independently generated, each forwarding engine 105 may be configured to forward new routing table configuration data received on one or more of the network interfaces 110 to every other intelligent router port 103 for updating each of the routing databases 104. In further embodiments, the intelligent router ports 103 may update their own routing tables according to the contents of incoming routing protocol packets. In still further embodiments, the intelligent router ports 103 may update other routers (not shown) interconnected with the router 100 using, for example, RIP, OSPF, and/or BGP4.

It is respectfully submitted that no where in the cited art is the limitation routing a packet first

through a Level 2 module, and then through a Layer 3 module "if said first Layer 2 module does not

recognize a Layer 2 address associated with said first received data packet," as recited by independent Claim 1.

Similar to independent Claim 1, independent Claim 9 recites "a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet and wherein said Layer 3 routing engine comprises a forwarding table comprising a plurality of aggregated Layer 3 addresses," and independent Claim 17 recites, "determining if the first Layer 2 module recognizes a Layer 2 address associated with the first received data packet; and if the first Layer 2 module does not recognize the Layer 2 address associated with the first received data packet, using a Layer 3 routing engine associated with the first Layer 2 module to forward the first received data packet through the switch fabric directly to a second one of the Layer 2 modules and wherein the Layer 3 routing engine uses a Layer 3 address associated with the first received data packet to forward the first received data packet." Accordingly, for the reasons discussed above in connection with Claim 1, independent Claims 9 and 17 are not made obvious by the cited art. Therefore, the Applicant respectfully submits that these rejections should now be withdrawn.

Dependent Claims 3-8, which depend from independent Claim 1, dependent Claims 11-16, which depend from independent Claim 9, and dependent Claims 19-24, which depend from independent Claim 17, are also not made obvious by the cited art because they include the limitations

of their respective base claims and add additional elements that further distinguish the art. Therefore, the Applicant respectfully submits that these rejections should now be withdrawn.

The Applicant disagrees with the Examiner's rejections of Claims 1, 3-9, 11-17 and 19-24 based on misdescriptions and/or misapplications of *Civanlar*, *Kumar* and *Wybenga* to at least some of Claims 1, 3-9, 11-17 and 19-24. However, the Applicant's arguments regarding those other shortcomings of *Civanlar*, *Kumar* and *Wybenga* are moot in view of the Claim 1 arguments above. However, the Applicant reserves the right to dispute in future Office Action responses the appropriateness and the applications of *Civanlar*, *Kumar* and *Wybenga* to the claims of the present application, including the right to dispute assertions made by the Examiner.

Accordingly, the Applicant respectfully requests the Examiner to withdraw the § 103 rejection with respect to these claims.
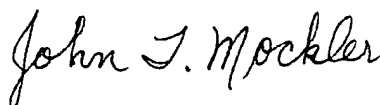
CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining claims in the Application are in condition for allowance, and respectfully requests that this Application be passed to issue.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *jmockler@munckcarter.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK CARTER P.C.

John J. Mockler

Date: <u>August 28, 2008</u>

John T. Mockler
Registration No. 39,775

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: *jmockler@munckcarter.com*